

Answers Chapter 20 Support & Movement Exam Review

pg 358 Vocabulary Review Matching #1, 2, 3, 4,6,7

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|-------------------|-------------|--------------|
| 1. axial skeleton | 3. . joint | 6. bones |
| 2. periosteum | 4. extensor | 7. voluntary |

pg 358 Applying Definitions #2, 4,5,6,7, 8

2. flexor bends at the joint when muscles move, extensors straighten at the joint when muscles move.

4. bone is very hard tissue, which is only slightly flexible. Cartilage is a tough tissue which is flexible

5. skeletal muscle is attached to the bones in your body and only moves when the bones move therefore it is voluntary. Involuntary muscles include the smooth muscle and cardiac muscles they do not need to be told by your body to move.

6. axial skeleton makes up the skull, rib cage and backbone whereas the appendicular skeleton is made up of bones of the shoulder, hip, pelvis, arms and legs.

7. Spongy bone is located at the ends of long bones and has many spaces like a sponge, Spongy bones add strength without adding much weight. Compact bone is the hardest part of your bone and is made of tough protein fibers, and mineral deposits, it does not have spaces like a spongy bone.

8. smooth muscle is found in the stomach, the intestines and blood vessels whereas cardiac muscle is found only in the heart.

Pg 359 Concept review: Understanding a Diagram #1, 2, 4, 5

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|-------------|--------------------|----------|---------------------|
| 1. clavicle | 2. radius and ulna | 4. Femur | 5. tibia and fibula |
|-------------|--------------------|----------|---------------------|

Content Review. Write T if the statement is true. If it is false, change the underlined words to make it true:

1. The skull protects the brain. T
2. The bones of the arms and legs are part of the axial skeleton. F (appendicular skeleton)
3. Cartilage is the tough, but flexible material in the ears. T
4. Skeletal muscles can only push bones. F (pull)
5. Inflamed joints are the main symptom of muscular dystrophy. F (arthritis)
6. Involuntary muscles are muscles that cannot be controlled. T
7. Blood cells are made in the tendons of bones. F (marrow)
8. Cardiac muscle is found only in the lungs. F (heart)
9. Fixed joints are found in the skull. T
10. Bones get their strength from calcium. T
11. Your upper arm is connected to your shoulder by a hinge joint. F (ball and socket joint)
12. The tip of your nose is made up of cartilage. T

Review Questions:

1. What are five functions of the skeleton?

Supports the body and gives it shape

Covers and protects certain body organs

Work with muscles to make movement possible

Some bones Make blood cells

Bones store minerals such as calcium and phosphorous that the body needs

2. Describe what happens to the skeleton of a baby during development and after birth?

As a baby the skeleton is made mostly of cartilage and very little bone, as you grow and develop the cartilage gets replaced by bone.

3. Describe three problems of the skeletal system.

Fractures - breaking a bone which can be partial or complete

Arthritis - inflamed joints which causes pain and limited movement. The cartilage between bones is destroyed and replaced with bone deposits.

Scoliosis - usual curve in your backbone.

4. Explain how muscles work, using the bicep and tricep as an example.

The biceps in the front of the arm bend your arm at the elbow. When the arm is bent the biceps contract or are flexed. The triceps are at the back of your arm. The job of the tricep is to straighten the arm or extend.

5. What are the four types of joints found in your skeletal system and how do they work?

The four types of joints are hinge joints, ball and socket joints, pivotal joints, and gliding joints. Hinge joints move back and forth in one direction only, ball and socket joints move in all directions, pivotal joints allows both side to side and up and down movemenst and gliding joints slide bones alone each other.

6. What is bone marrow and what is the difference between red bone marrow and yellow bone marrow?

Bone marrow is the soft tissue contained within bones. Red bone marrow is responsible for producing blood cells and yellow bone marrow contains fat.

Label the following diagram:

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|--------------------------|------------------------|--------------------------|-------------------|
| 1. skull | 2. jaw bone (mandible) | 3. collarbone (clavicle) | 4. shoulder blade |
| 5. breast bone (sternum) | 6. rib cage | 7. Humerous | 8. spine |
| 9. ulna | 10. Radius | 11. illium (pelvis) | 12. femur |
| 13. tibia | 14. fibula | | |